

## Abstract

It is an object of the present invention to provide a radio communication medium comprising having a stable performance that does not require a correction for an unwanted phase, especially, the influence of a metallic structure does not need to adjust the resonance frequency of an antenna or an impedance, to excitation, in its environment and extensibility upon localization and using the unnecessary wave from a peripheral. In electric current fed loop antenna units, non-electric current fed loop antenna are arranged in daughter shapes outside the substantially same planes of electric current fed loop antennas so as to surround the electric current fed loop antenna. Then, when non-electric current fed loop antenna units are installed linearly, in radial directions and in arrays, adjacently to electric current fed loop antenna units, the influence of the non-electric current fed loop antenna units to the antenna characteristics of the electric current fed loop antenna units can be suppressed. When the non-electric current fed loop antenna units are extended and increased the amount of the electric current fed loop antenna units do not need to be adjusted.